(d) what is the projected distribution of readers of technical articles in Hindi in, Government Depart, ments, industry and educational institutions?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) to (d) The information is being collected and will be laid on the Table of the House.

Imperting of environmental education

3024. SHRi ANANTRAY DEV-SHANKER DAVE: Will the PRIME MINISTER be pleased to state:

(a) whether Government propose to adopt an integrated approach so as to impart environmental education bringing in its purview zoological parks, botanical garden and children games;

(b) if so, what are the details thereof;

(c) which centres have b^en identified so far for the purpose; and

(d) whether Government propose to introduce traditional Indian names of plants and their medicinal importance in children books and T. V. programmes in view of the fact that the modern names of the plants arc very difficult to grasp?

THE MINISTER OF STATE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (SHRI CHIMANBHAI MEHTA): (a) to (c) No such proposal for bringing identified zoological parks, botanical garden and children games within the purview of environmental educa. tion is under consideration. However, contents designed to impart environmental education are included in the text books on Environmental Studies for Classes III to V and the text books for science subjects for Classes VI to XII. These also contain information o$_n$ zoolagical parks, botanical gardens and environment related chijdren's activities, wherever necessary. It is also suggested in the curriculum that, wherever possible, teachers may take children to National parks and zoological and botanical gardens,

(d) th$_e$ common vernacular names including traditional names are used at primary and upper primary levels; while at secondary and senior secondary level both traditinoal and scientific name are used.

Study to ascertain conditions of scientists

3025. SHRI SIKANDER BAKHT: Will the PRIME MINISTER be pleased to state:

(a) whether any study has been made to ascertain the reasons for growing frustration among scientists in technical department; if so, the details thereof;

(b) what efforts have been made for making a Science and Technology cadre so as to ensure fearless contribution of scientists in various technical departments;

(c) whether it is a fact that scientists take much longer time to reach the level of Joint Secretary as compared to personnel in organised services; and

(d) if so, what corrective measures are being taken to eliminate anomo-lies in promotion prospects of scientists vis-a-vis personnel of organised services?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) to (d) Scientists individually and in groups do bring to the notice of the Government, their perception of the problems and difficulties they face. Government has mechanisms to review all such issues on a continuing basis and take corrective measures, as and when re-quired.

Government has streamlined the personnel policies of Science and Technology Departments to enable them to establish and grow the scientific culture essential to their efficient functioning. Instead of vacancy based promotions as in other services, a Scheme of Flexible Complementing (FCS) which provides in situ promotions to scientists upto the senior administrative grade (Rs. 5900—7300), has been introduced. It is based entirely on an objective assessment of merit on periodical performance review after residency period of 5 years in each grade. It accords due recognition to individual achievements of scientists in their respective specialised fields and encourages them to strive for better performances. This system of promotion provides satisfactory career progression to scientists in Science and Technology Departments.

There will always be variations between different cadres, organised services, categories of work, Sectors of Science and Technology etc. in matters relating to personnel policies. Each career pathways offers its advantages and dis-advantages.

Indo-Japanese Cooperation on Development of Machine Translation System

3026. SHRI SIKANDER BAKHT: Will the PRIME MINISTER-be pleased to state:

(a) whether International Science and Technology Cooperation with Japan includes development of Machine Translation Systems if so, the details thereof;

(b) if not, what strategy has been adopted to benefit from the Japanese experience in Machine Translation; and

(c) in what manner the programme of the Department of Electronics on Technology Development Mission for Indian Languages relate to Indo-Japan Cooperation programme under Department of Science and Technology?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) No, Sir.

(b) Department of Electronics has taken the initiative to study Japanese experience on Machine Translation. The possibility of collaboration with CICC (Centre for International Cooperation for Computerization) is to be explored in the area of multi-lingual/ multi-scriptal Machine Translation.

(c) The Programme on 'Technology Development for Indian Language' is being initiated by the Department of Electronics. The objectives and planned activities of the TDIL Programme will be communicated for discussion under the Indo-Japan and other international cooperation programme.

3027. Transferred to the 5th September, 1990)

Foreign Travel by Scientists in Government Departments

3028. SHRI SIKANDER BAKHT: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that there is no policy regarding foreign travles by scientists in Government Departments;

(b) if so, what is the status of foreign travels during the last 5 years for each technical department in terms of percentage of scientists availing foreign travels under 2 weeks under 2 months and above 2 months;

(c) what percentage of travels were proved useful with tangible-follow-up; and

(a) what attempts have been made to restrict foreign travels and ensure each travel result-oriented?